

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application No. 09/589,288

Confirmation No. 1519

Applicant: Yu et al.

Filed: June 8, 2000

TC/AU: 1647

Examiner: Bridget E. Bunner

Docket No.: 702041 (Client Reference No. PF343P3C5)

Customer No.: 73326

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY TO BOARD DECISION AND EXAMINER INTERVIEW SUMMARY

Sir:

In reply to the Board's decision of July 17, 2008, and in accordance with the Examiner Interview Summary dated April 24, 2009, please enter the following amendments and consider the following remarks.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 18 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1.-194. (Cancelled)

195. (Currently Amended) A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is

MDDSTEREQS RLTSCCLKRE EMKLKECVSI LPRKESPSVR SSKDGKLLAA
TLLLALLSCC LTVVSFYQVA ALQGDLASLR AELQGHHA EK LPAGAGAPKA
GLEEAPAVTA GLKIFEPPAP GEGNSSQNSR NKRAVQGPEE TVTQDCLQLI
ADSETPTIQK GSYTFVPWLL SFKRGSAL EE KENKILVKET GYFFIYGQVL
YTDKTYAMGH LIQRKKVHVF GDELSLVTLF RCIQNMPETL PNNSCYSAGI
AKLEEGDELQ LAIPRENAQI SLDGDVTFFG ALKLL (amino acid residues 134-285 of SEQ ID NO:2)

wherein B lymphocytes are inhibited.

196. (Previously Presented) A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin- α (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.

197. (Previously Presented) A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin- α (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.

198. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.

199. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is recombinantly produced.

200. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.

201. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is a humanized antibody.

202. (Previously Presented) The method of any one of claims 195-197, wherein the antibody comprises human constant domains.

203. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is a F(ab')₂ fragment.

204. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.

205. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is a Fab fragment.

206. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is administered to an individual.

207. (Previously Presented) The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.

208-221. (Cancelled)

222. (New) A method of treating an autoimmune system disease or disorder comprising administering to an individual, an effective amount of an antagonistic antibody or portion thereof that specifically binds a protein consisting of an amino acid sequence of amino acid residues 134-285 of SEQ ID NO:2.

223. (New) The method of claim 222 wherein the antibody or portion thereof is a monoclonal antibody.

224. (New) The method of claim 222 wherein the antibody or portion thereof is a polyclonal antibody.

225. (New) The method of claim 222 wherein the antibody or portion thereof is a Fab fragment.

226. (New) The method of claim 222 wherein the antibody or portion thereof is labeled.

227. (New) The method of claim 226 wherein the label is selected from the group consisting of:

- (a) an enzyme label;
- (b) a radioisotope;
- (c) a fluorescent label; and
- (d) biotin.

228. (New) The method of claim 227 wherein the label is a radioisotope selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{131}I ;
- (d) ^{112}In ; and
- (e) $^{99\text{m}}\text{Tc}$.

229. (New) A method of treating rheumatoid arthritis comprising administering to an individual, an effective amount of an antagonistic antibody or portion thereof that specifically binds a protein consisting of the amino acid sequence of amino acid residues 134-285 of SEQ ID NO:2.

230. (New) The method of claim 229 wherein the antibody or portion thereof is a monoclonal antibody.

231. (New) The method of claim 229 wherein the antibody or portion thereof is a polyclonal antibody.

232. (New) The method of claim 229 wherein the antibody or portion thereof is a Fab fragment.

233. (New) The method of claim 229 wherein the antibody or portion thereof is labeled.

234. (New) The method of claim 233 wherein the label is selected from the group consisting of:

- (a) an enzyme label;
- (b) a radioisotope;
- (c) a fluorescent label; and
- (d) biotin.

235. (New) The method of claim 234 wherein the label is a radioisotope selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{131}I ;
- (d) ^{112}In ; and
- (e) $^{99\text{m}}\text{Tc}$.

236. (New) A method of inhibiting B lymphocyte proliferation, differentiation or survival comprising administering to an individual or a cell culture containing B lymphocytes, an effective amount of an antagonistic antibody or portion thereof that specifically binds a protein consisting of an amino acid sequence selected from the group consisting of:

- (a) the amino acid sequence of amino acid residues n to 285 of SEQ ID NO:2, where n is an integer in the range of 2-190;
- (b) the amino acid sequence of amino acid residues 1 to m of SEQ ID NO:2, where m is an integer in the range of 274 to 284; and
- (c) the amino acid sequence of amino acid residues n to m of SEQ ID NO:2, where n is an integer in the range of 2-190 and m is an integer in the range of 274-284.

237. (New) The method of claim 236 wherein the protein consists of amino acid sequence (a).

238. (New) The method of claim 236 wherein the protein consists of amino acid sequence (b).

239. (New) The method of claim 236 wherein the protein consists of amino acid sequence (c).

240. (New) The method of claim 236 wherein the antibody or portion thereof is a monoclonal antibody.

241. (New) The method of claim 236 wherein the antibody or portion thereof is a polyclonal antibody.

242. (New) The method of claim 236 wherein the antibody or portion thereof is a Fab fragment.

243. (New) The method of claim 236 wherein the antibody or portion thereof is labeled.

244. (New) The method of claim 243 wherein the label is selected from the group consisting of:

- (a) an enzyme label;
- (b) a radioisotope;
- (c) a fluorescent label; and
- (d) biotin.

245. (New) The method of claim 244 wherein the label is a radioisotope selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{131}I ;
- (d) ^{112}In ; and
- (e) $^{99\text{m}}\text{Tc}$.

246. (New) A method of inhibiting B lymphocyte proliferation, differentiation, or survival comprising administering to an individual or a cell culture containing B lymphocytes, an effective amount of an antagonistic antibody or portion thereof that specifically binds a protein consisting of an amino acid sequence of amino acid residues 134-285 of SEQ ID NO:2.

247. (New) The method of claim 246 wherein the antibody or portion thereof is a monoclonal antibody.

248. (New) The method of claim 246 wherein the antibody or portion thereof is a polyclonal antibody.

249. (New) The method of claim 246 wherein the antibody or portion thereof is a Fab fragment.

250. (New) The method of claim 246 wherein the antibody or portion thereof is labeled.

251. (New) The method of claim 250 wherein the label is selected from the group consisting of:

- (a) an enzyme label;
- (b) a radioisotope;
- (c) a fluorescent label; and
- (d) biotin.

252. (New) The method of claim 251 wherein the label is a radioisotope selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{131}I ;
- (d) ^{112}In ; and
- (e) $^{99\text{m}}\text{Tc}$.

253. (New) The method of claim 222 wherein the autoimmune disease or disorder is systemic lupus erythematosus.

254. (New) A method of treating an autoimmune disease or disorder comprising administering to an individual, an effective amount of an antagonistic antibody or portion thereof that specifically binds to an isolated recombinant Neutrokin- α protein purified from a cell culture wherein the cells in said cell culture comprise a polynucleotide encoding amino acids 1-285 of SEQ ID NO:2 operably associated with a regulatory sequence that controls gene expression.

255. (New) The method of claim 254 wherein the antibody or portion thereof is a monoclonal antibody.

256. (New) The method of claim 254 wherein the antibody or portion thereof is a polyclonal antibody.

257. (New) The method of claim 254 wherein the antibody or portion thereof is a Fab fragment.

258. (New) The method of claim 254 wherein the antibody or portion thereof is labeled.

259. (New) The method of claim 258 wherein the label is selected from the group consisting of:

- (a) an enzyme label;
- (b) a radioisotope;
- (c) a fluorescent label; and
- (d) biotin.

260. (New) The method of claim 259 wherein the label is a radioisotope selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{131}I ;
- (d) ^{112}In ; and
- (e) $^{99\text{m}}\text{Tc}$.

261. (New) The method of claim 254 wherein the autoimmune disease or disorder is systemic lupus erythematosus.

262. (New) A method of treating rheumatoid arthritis comprising administering to an individual, an effective amount of an antagonistic antibody or portion thereof that specifically binds to an isolated recombinant Neutrokin- α protein purified from a cell culture wherein the cells in said cell culture comprise a polynucleotide encoding amino acids 1-285 of SEQ ID NO:2 operably associated with a regulatory sequence that controls gene expression.

263. (New) The method of claim 262 wherein the antibody or portion thereof is a monoclonal antibody.

264. (New) The method of claim 262 wherein the antibody or portion thereof is a polyclonal antibody.

265. (New) The method of claim 262 wherein the antibody or portion thereof is a Fab fragment.

266. (New) The method of claim 262 wherein the antibody or portion thereof is labeled.

267. (New) The method of claim 266 wherein the label is selected from the group consisting of:

- (a) an enzyme label;
- (b) a radioisotope;
- (c) a fluorescent label; and
- (d) biotin.

268. (New) The method of claim 267 wherein the label is a radioisotope selected from the group consisting of:

- (a) ^{125}I ;
- (b) ^{121}I ;
- (c) ^{131}I ;
- (d) ^{112}In ; and
- (e) $^{99\text{m}}\text{Tc}$.

269. (New) The method of claim 236 which comprises administering to an individual an effective amount of said antagonistic antibody or portion thereof.

270. (New) The method of claim 236 which comprises administering to a cell culture containing B lymphocytes an effective amount of said antagonistic antibody or portion thereof.

271. (New) The method of claim 246 which comprises administering to an individual an effective amount of said antagonistic antibody or portion thereof.

272. (New) The method of claim 246 which comprises administering to a cell culture containing B lymphocytes an effective amount of said antagonistic antibody or portion thereof.

273. (New) The method of claim 222 wherein said antibody or portion thereof is administered intravenously.

274. (New) The method of claim 222 which comprises administering between 0.1 and 20 mg/kg of the patient's body weight of said antibody or portion thereof.

275. (New) The method of claim 229 wherein said antibody or portion thereof is administered intravenously.

276. (New) The method of claim 229 which comprises administering between 0.1 and 20 mg/kg of the patient's body weight of said antibody or portion thereof.

277. (New) The method of claim 254 wherein said antibody or portion thereof is administered intravenously.

278. (New) The method of claim 254 which comprises administering between 0.1 and 20 mg/kg of the patient's body weight of said antibody or portion thereof.

279. (New) The method of claim 262 wherein said antibody or portion thereof is administered intravenously.

280. (New) The method of claim 262 which comprises administering between 0.1 and 20 mg/kg of the patient's body weight of said antibody or portion thereof.

281. (New) The method of claim 222, wherein the autoimmune system disease or disorder is selected from the group consisting of systemic lupus erythematosus, idiopathic thrombocytopenic purpura (ITP), Sjogren's syndrome, Waldenstrom's macroglobulinaemia, multiple sclerosis, cancer, asthma, nephritis, diabetes, scleroderma, vasculitis, cryoglobulinaemia, graft-versus-host disease (GVHD), renal transplantation, and antiphospholipid syndrome.

282. (New) The method of claim 281, wherein the antibody or portion thereof is a monoclonal antibody.

283. (New) The method of claim 281, wherein the antibody or portion thereof is a polyclonal antibody.

284. (New) The method of claim 1, wherein the antibody or portion thereof is a Fab fragment.

285. (New) The method of claim 1, wherein the antibody or portion thereof is labeled.
286. (New) The method of claim 285, wherein the label is selected from the group consisting of:
- (a) an enzyme label;
 - (b) a radioisotope;
 - (c) a fluorescent label; and
 - (d) biotin.
287. (New) The method of claim 286, wherein the label is a radioisotope selected from the group consisting of:
- (a) ^{125}I ;
 - (b) ^{121}I ;
 - (c) ^{131}I ;
 - (d) ^{112}In ; and
 - (e) $^{99\text{m}}\text{Tc}$.
288. (New) The method of claim 254, wherein the autoimmune system disease or disorder is selected from the group consisting of systemic lupus erythematosus, idiopathic thrombocytopenic purpura (ITP), Sjogren's syndrome, Waldenstrom's macroglobulinaemia, multiple sclerosis, cancer, asthma, nephritis, diabetes, scleroderma, vasculitis, cryoglobulinaemia, graft-versus-host disease (GVHD), renal transplantation, and antiphospholipid syndrome.
289. (New) The method of claim 281, wherein the antibody or portion thereof is administered intravenously.
290. (New) The method of claim 281, wherein the method comprises administering between 0.1 and 20 mg/kg of the patient's body weight of the antibody or portion thereof.
291. (New) The method of claim 281, wherein the autoimmune system disease or disorder is idiopathic thrombocytopenic purpura (ITP).
292. (New) The method of claim 281, wherein the autoimmune system disease or disorder is Sjogren's syndrome.

293. (New) The method of claim 281, wherein the autoimmune system disease or disorder is multiple sclerosis.

294. (New) The method of claim 281, wherein the autoimmune system disease or disorder is renal transplantation.

295. (New) The method of claim 288, wherein the autoimmune system disease or disorder is systemic lupus erythematosus.

296. (New) The method of claim 288, wherein the autoimmune system disease or disorder is rheumatoid arthritis.

297. (New) The method of claim 288, wherein the autoimmune system disease or disorder is idiopathic thrombocytopenic purpura (ITP).

298. (New) The method of claim 288, wherein the autoimmune system disease or disorder is Sjogren's syndrome.

299. (New) The method of claim 288, wherein the autoimmune system disease or disorder is multiple sclerosis.

300. (New) The method of claim 288, wherein the autoimmune system disease or disorder is renal transplantation.

301. (New) A method of treating an autoimmune disease in an animal comprising administering a therapeutically effective amount of an anti-Neutrokin- α antibody that binds to human Neutrokin α polypeptide having the amino acid sequence of SEQ ID NO:2.

302. (New) The method of claim 301, wherein the antibody is a monoclonal antibody.

303. (New) The method of claim 301, wherein the antibody is recombinantly produced.

304. (New) The method of claim 301, wherein the antibody is a chimeric antibody.

305. (New) The method of claim 301, wherein the antibody is a humanized antibody.

306. (New) The method of claim 301, wherein the antibody comprises human constant domains.

307. (New) The method of claim 301, wherein the antibody is a F(ab')₂ fragment.

308. (New) The method of claim 301, wherein the animal is human.

309. (New) The method of claim 301, further comprising detecting the levels of B cell growth and immunoglobulin production in the animal.

310. (New) The method of claim 301, further comprising detecting circulating levels of rheumatoid factor in the animal.

311. (New) The method of claim 301, further comprising detecting the level of B cell growth in the animal.

312. (New) The method of claim 301, further comprising detecting the level of immunoglobulin production in the animal.

313. (New) A method of treatment of an autoimmune disease comprising the step of administering a therapeutically effective amount of a composition selected from the group consisting of: (a) a Neutrokin- α antagonist and/or Neutrokin- α SV antagonist molecule or an active fragment thereof; and (b) an antibody specific for anti-Neutrokin α or an active fragment thereof.

314. (New) The method according to claim 313, wherein the Neutrokin- α antagonist and/or Neutrokin- α SV antagonist is soluble.

315. (New) The method according to claim 314, wherein the soluble Neutrokin- α antagonist and/or Neutrokin- α SV antagonist is recombinant.

316. (New) The method according to claims 313-315, wherein the anti-Neutrokin- α antibody is a monoclonal antibody.

317. (New) A method of inducing apoptosis comprising the administration of an agent capable of interfering with the binding of a Neutrokin- α and/or Neutrokin- α SV to a receptor.

318. (New) A method of treating, suppressing or altering an immune response involving an interaction between a Neutrokin- α and/or Neutrokin- α SV and its receptor comprising the step of administering an effective amount of an agent capable of interfering with the interaction between the Neutrokin- α and/or Neutrokin- α SV and its receptor.

319. (New) A method of inhibiting inflammation comprising the step of administering a therapeutically effective amount of an antibody specific for a Neutrokin- α and/or Neutrokin- α SV or an active fragment thereof.

320. (New) A method of treating, suppressing or altering an immune response involving a signaling pathway between a Neutrokin- α and/or Neutrokin- α SV and its receptor comprising the step of administering an effective amount of an agent capable of interfering with the association between the Neutrokin- α and/or Neutrokin- α SV and its receptor.

321. (New) A method of treating cardiovascular disorders in an animal comprising the step of administering a therapeutically effective amount of a B-cell growth inhibitor.

322. (New) A method of treating cardiovascular disorders in an animal comprising the step of administering a therapeutically effective amount of a co-inhibitor of B-cell growth and immunoglobulin production.

323. (New) A method of treating renal disorders in an animal comprising the step of administering a therapeutically effective amount of a B-cell growth inhibitor.

324. (New) A method of treating renal disorders in an animal comprising the step of administering a therapeutically effective amount of a co-inhibitor of B-cell growth and immunoglobulin production.

325. (New) A method of treating a B-cell lympho-proliferative disorder comprising the step of administering a therapeutically effective amount of a B-cell growth inhibitor.

326. (New) A method for treating or reducing the advancement, severity or effects of Sjogren's syndrome in a patient comprising the step of administering a pharmaceutical composition comprising a therapeutically effective amount of a Neutrokin- α and/or Neutrokin- α SV antagonist and a pharmaceutically acceptable carrier.

327. (New) The method of claim 326 wherein the Neutrokin-alpha and/or Neutrokin-alphaSV antagonist is an antibody directed against Neutrokin-alpha and/or Neutrokin-alphaSV.

328. (New) The method of claim 327 wherein the antibody directed against Neutrokin-alpha and/or Neutrokin-alphaSV is a monoclonal antibody.

329. (New) A method of treating a mammal, the method comprising administering to a mammal having Sjogren's syndrome a composition comprising a Neutrokin-alpha and/or Neutrokin-alphaSV antagonist, thereby reducing immunoglobulin production or B cell growth in the mammal.

330. (New) The method of claim 329, wherein the mammal is a human.

331. (New) The method of claim 329, wherein the mammal is a mouse.

332. (New) The method of claim 331, wherein the mouse is a BAFF Tg mouse.

333. (New) The method of claim 329, wherein the Neutrokin-alpha and/or Neutrokin-alphaSV antagonist is an antibody against Neutrokin-alpha and/or Neutrokin-alphaSV.

334. (New) The method of claim 333, wherein the antibody against Neutrokin-alpha and/or Neutrokin-alphaSV is a monoclonal antibody.

335. (New) The method of claim 334, wherein the antibody is recombinantly produced.

336. (New) The method of claim 334, wherein the antibody is a chimeric antibody.

337. (New) The method of claim 334, wherein the antibody is a humanized antibody.

338. (New) The method of claim 334, wherein the antibody comprises human constant domains.

339. (New) The method of claim 334, wherein the antibody is a F(ab')₂ fragment.

340. (New) The method of claim 329, further comprising detecting the level of B cell proliferation in the mammal.

341. (New) The method of claim 329, further comprising detecting the level of immunoglobulin production in the mammal.

342. (New) The method of claim 329, further comprising detecting the levels of B cell proliferation and immunoglobulin production in the mammal.

343. (New) The method of claim 329, further comprising detecting circulating levels of a rheumatoid factor in the mammal.

344. (New) The method of claim 329, further comprising detecting circulating levels of anti-DNA autoantibody in the mammal.

345. (New) A method for treating a fibrosis condition, the method comprising administering to a patient in need of such treatment a therapeutically effective amount of an Neutrokin- α and/or Neutrokin- α SV antagonist.

346. (New) The method of claim 345, further comprising administering a therapeutically effective amount of a B-cell antagonist to said patient.

347. (New) The method of claim 345, wherein the patient does not have an autoimmune disorder.

348. (New) The method of claim 345, wherein the patient is not at risk of having an autoimmune disorder.

349. (New) A method for treating pulmonary fibrosis, the method comprising administering to a patient in need of such treatment a therapeutically effective amount of a B-cell antagonist.

350. (New) The method of claim 345, wherein after the B-cell antagonist is administered to the patient, the patient exhibits a decrease in one or more features of fibrosis as compared to the patient prior to administration of the B-cell antagonist.

351. (New) A method for treating liver cirrhosis, the method comprising administering to a patient in need of such treatment a therapeutically effective amount of a B-cell antagonist.

352. (New) A method for treating renal fibrosis, the method comprising administering to a patient in need of such treatment a therapeutically effective amount of a B-cell antagonist.

353. (New) A method for preventing a fibrosis condition, the method comprising administering to a patient at risk of developing one or more fibrosis conditions a therapeutically effective amount of a B-cell antagonist.

REMARKS/ARGUMENTS

The Pending Claims

Claims 195-207 and 222-353 currently are pending and subject to examination.

Examiner Interview

Applicants thank Examiner Bunner for the courtesies extended to Applicants' representatives in telephone interviews of April 3, 2009 and April 15, 2009. An informality in claim 195 was discussed, as well as previously allowed claims 85-91, 118-124, and 148-180. In addition, the provisional obviousness-type double patenting rejections in co-pending U.S. Patent Application Nos. 11/377,165 and 11/382,837 were discussed. After considering the aforementioned claims, the Examiner requested that Applicants add previously allowed claims 85-91, 118-124, and 148-180 to the present application. In addition, the Examiner requested that Applicants add the examined claims of U.S. Patent Application Nos. 11/377,165 and 11/382,837 to the present application in order to obviate the obviousness-type double patenting rejections in those other patent applications.

During the course of the telephonic interviews, the Information Disclosure Statements recently filed in U.S. Patent Application Nos. 11/377,165 and 11/382,837 were discussed, and the Examiner invited Applicants to submit a similar Information Disclosure Statement in the present application, which the Examiner graciously indicated would be considered.

Amendments to the Claims

The claims have been amended as discussed in the Examiner Interviews of April 3, 2009, and April 15, 2009, and as requested by the Examiner in the Interview Summary dated April 24, 2009 (see Paper No. 20090415). Specifically, claim 195 has been amended to indicate that the amino acid sequence recited in claim 195 corresponds to amino acid residues 134-285 of SEQ ID NO:2. In addition, new claims 222-353 have been added.

New claims 222-280 are identical to previous claims 85-91, 118-124, 148-180, and 183-194, respectively, presented in the "Reply to Office Action" dated December 2, 2004,

which claims were indicated as allowable in the letter of suspension dated May 9, 2005 (see Paper No. 04212005).

New claims 281-300 substantially correspond to claims 1-7, 16, 31-32, and 41-50, respectively, of co-pending U.S. Patent Application No. 11/377,165. In particular, new claims 281 and 288 correspond to claims 1 and 16, respectively, of co-pending U.S. Patent Application No. 11/377,165 re-written in dependent form.

New claims 301-312 substantially correspond to claims 1-8, 11-12, and 29-30, respectively, of co-pending U.S. Patent Application No. 11/382,837.

Applicants hereby advise the United States Patent and Trademark Office that the subject matter encompassed by new claims 313-353 of the present application is related to the subject matter encompassed by several published U.S. patent applications. In particular, the subject matter defined by new claims 313-325 is substantially identical to the subject matter defined by published claims 17, 23-25, 27-29, 32, and 42-46 of U.S. Patent Application Publication No. 2002/0037852. The subject matter defined by new claims 326-328 is substantially identical to the subject matter defined by published claims 51, 52, and 57 of U.S. Patent Application Publication No. 2003/0095967. The subject matter defined by new claims 329-344 is substantially identical to the subject matter defined by published claims 60-63, 65, and 75-85 of U.S. Patent Application Publication No. 2005/0244411. The subject matter defined by new claims 345-353 is substantially identical to the subject matter defined by published claims 1, 11, 14, 15, 19, 23, 31, 35, and 47 of U.S. Patent Application Publication No. 2007/0009518.

New claims 313-353 have been added to the instant application in order to avoid any questions of compliance with the requirements of 35 U.S.C. § 135(b) should an interference later be desired and/or determined to be appropriate. By adding these claims, Applicants make no assertions regarding the patentability of these claims.

New claims 313-353 are supported by the specification as filed, for example, at page 13, lines 16-21, page 18, lines 16-25, page 19, line 13, page 20, lines 10-12, page 219, lines 6-18, page 228, lines 15-23, page 229, lines 5-6, page 234, line 26 through page 235, line 1, page 237, lines 17-22, page 259, lines 3-4, page 259, line 10 through page 260, line 3, page

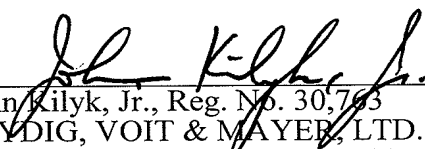
267, lines 16-18, page 281, line 22 through page 282, line 3, page 291, lines 1-6, page 295, lines 3-18, page 319, line 26, page 320, lines 12-18, page 331, lines 15-22, page 336, line 25 through page 337, line 2, page 339, line 22 through page 340, line 4, page 343, lines 12-23, page 345, line 20, page 346, lines 11-19, page 368, lines 6-11, and page 424, lines 19-27.

No new matter has been added by way of these amendments.

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



John Kilyk, Jr., Reg. No. 30,763
LEYDIG, VOIT & MAYER, LTD.
Two Prudential Plaza, Suite 4900
180 North Stetson Avenue
Chicago, Illinois 60601-6731
(312) 616-5600 (telephone)
(312) 616-5700 (facsimile)

Date: May 12, 2009